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**D2010-104**  
**Job Sheet 191471**



**Part No:** D2010-104

**Job Qty:** 6 pcs

**Part Name:** Arm



**Part Weight:** 0 lbs

**Status:** New

**Priority:** Medium

**Job Created:** 3/1/19

**Job Tracking No:**

**Due Date:** 3/20/19

**Created By:** Marie Lajeunesse

**Type:** Stock

**Description:**

**Note:** DWG REV D IPP A 04.02.17 New issue KJ/JLM IPP Rev:B 08-05-27 as per ECN1195P DD verified by:EC IPP  
Rev:C 08-06-20 rev.D as per dwg DD verified by:EC

**Ship Via:**

### Bill of Materials

### Job Routing

| Op<br>No | Operation            | Qty      | Start Date | Due<br>Date | Standard     |            | Workcenter/Supplier      |           | Sign-off                      |
|----------|----------------------|----------|------------|-------------|--------------|------------|--------------------------|-----------|-------------------------------|
|          |                      |          |            |             | Setup<br>Hrs | Run<br>Hrs | Workcenter /<br>Supplier | Lead Time |                               |
| 100      | Small Fab - Brake NC | 6<br>pcs | 3/20/19    |             | 0.00         | 1.95       | Small Fab - Brake - 1    |           | DAS<br>58<br>9-89 MAR 20 2019 |
|          |                      |          |            |             |              |            | Small Fab - Brake - 2    |           |                               |
|          |                      |          |            |             |              |            | Small Fab - Brake - 3    |           |                               |
| 110      | Small Fab - 2 - B4B  | 6<br>pcs | 3/20/19    |             | 0.00         | 0.00       | Small Fab - 1 - B4B      |           | DAS<br>58<br>9-89 MAR 20 2019 |
|          |                      |          |            |             |              |            | Small Fab - 2 - B4B      |           |                               |
|          |                      |          |            |             |              |            | Small Fab - 3 - B4B      |           |                               |
|          |                      |          |            |             |              |            | Small Fab - 4 - B4B      |           |                               |
|          |                      |          |            |             |              |            | Small Fab - 5 - B4B      |           |                               |
|          |                      |          |            |             |              |            | Small Fab - 6 - B4B      |           |                               |
|          |                      |          |            |             |              |            | Small Fab - 7 - B4B      |           |                               |
| 120      | Small Fab - 3 - B4B  | 6<br>pcs | 3/20/19    |             | 0.00         | 1.23       | Small Fab - 1 - B4B      |           | DAS<br>58<br>9-89 MAR 20 2019 |
|          |                      |          |            |             |              |            | Small Fab - 2 - B4B      |           |                               |
|          |                      |          |            |             |              |            | Small Fab - 3 - B4B      |           |                               |
|          |                      |          |            |             |              |            | Small Fab - 4 - B4B      |           |                               |
|          |                      |          |            |             |              |            | Small Fab - 5 - B4B      |           |                               |
|          |                      |          |            |             |              |            | Small Fab - 6 - B4B      |           |                               |
|          |                      |          |            |             |              |            | Small Fab - 7 - B4B      |           |                               |
| 130      | QC 5                 | 6<br>pcs | 3/20/19    |             | 0.00         | 0.00       | QC 5 - 10                |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 12                |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 17                |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 18                |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 19                |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 22                |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 24                |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 3                 |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 42                |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 43                |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 49                |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 51                |           |                               |
|          |                      |          |            |             |              |            | QC 5 - 58                |           |                               |
|          |                      |          |            |             |              |            |                          |           |                               |

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|                                     |       |         |           |                        |       |              |                   |
|-------------------------------------|-------|---------|-----------|------------------------|-------|--------------|-------------------|
|                                     |       |         |           | QC 5 - 68              |       | MAR 2 2 2019 | DAS<br>40<br>9-89 |
|                                     |       |         |           | QC 5 - 9               |       |              |                   |
|                                     |       |         |           | QC 5 - 50              |       |              |                   |
|                                     |       |         |           | QC 5 - 30              |       |              |                   |
| 140 Powdercoat - 4 Black Sand - B4B | 6 pcs | 3/20/19 | 0.00 0.18 | Powdercoat - 1 - B4B   |       | BL 19-03-05  |                   |
|                                     |       |         |           | Powdercoat - 2 - B4B   |       |              |                   |
|                                     |       |         |           | Powdercoat - 3 - B4B   |       |              |                   |
|                                     |       |         |           | Powdercoat - 4 - B4B   |       |              |                   |
| 150 QC 3                            | 6 pcs | 3/20/19 | 0.00 0.00 | QC 3 - 10              |       |              |                   |
|                                     |       |         |           | QC 3 - 13              |       |              |                   |
|                                     |       |         |           | QC 3 - 15              |       |              |                   |
|                                     |       |         |           | QC 3 - 17              |       |              |                   |
|                                     |       |         |           | QC 3 - 18              |       |              |                   |
|                                     |       |         |           | QC 3 - 2               |       |              |                   |
|                                     |       |         |           | QC 3 - 26              |       |              |                   |
|                                     |       |         |           | QC 3 - 28              |       |              |                   |
|                                     |       |         |           | QC 3 - 3               |       |              |                   |
|                                     |       |         |           | QC 3 - 30              |       |              |                   |
|                                     |       |         |           | QC 3 - 34              |       |              |                   |
|                                     |       |         |           | QC 3 - 36              |       |              |                   |
|                                     |       |         |           | QC 3 - 41              |       |              |                   |
|                                     |       |         |           | QC 3 - 51              |       |              |                   |
|                                     |       |         |           | QC 3 - 58              |       |              |                   |
|                                     |       |         |           | QC 3 - 59              |       |              |                   |
|                                     |       |         |           | QC 3 - 6               |       |              |                   |
|                                     |       |         |           | QC 3 - 68              |       |              |                   |
|                                     |       |         |           | QC 3 - 9               |       |              |                   |
|                                     |       |         |           | QC 3 - 40              |       |              |                   |
| 160 Packaging 3-1 - Stock - B4B     | 6 pcs | 3/20/19 | 0.00 0.00 | Packaging 3 - 1 - B4B  |       | MAR 2 6 2019 | DAS<br>40<br>9-89 |
|                                     |       |         |           | Packaging 3 - 2 - B4B  |       |              |                   |
|                                     |       |         |           | Packaging 3 - 3 - B4B  |       |              |                   |
|                                     |       |         |           | Packaging 3 - 4 - B4B  | 37351 |              |                   |
|                                     |       |         |           | Packaging 3 - 5 - B4B  |       |              |                   |
|                                     |       |         |           | Packaging 3 - 6 - B4B  |       |              |                   |
|                                     |       |         |           | Packaging 3 - 7 - B4B  |       |              |                   |
|                                     |       |         |           | Packaging 3 - 8 - B4B  |       |              |                   |
|                                     |       |         |           | Packaging 3 - 9 - B4B  |       |              |                   |
|                                     |       |         |           | Packaging 3 - 10 - B4B |       |              |                   |
|                                     |       |         |           | Packaging 3 - 11 - B4B |       |              |                   |
|                                     |       |         |           | Packaging 3 - 12 - B4B |       |              |                   |
|                                     |       |         |           | Packaging 3 - 13 - B4B |       |              |                   |
|                                     |       |         |           | Packaging 3 - 14 - B4B |       |              |                   |
|                                     |       |         |           | Packaging 3 - 15 - B4B |       |              |                   |
|                                     |       |         |           | Packaging 3 - 16 - B4B |       |              |                   |
|                                     |       |         |           | Packaging 3 - 17 - B4B |       |              |                   |
|                                     |       |         |           | Packaging 3 - 18 - B4B |       |              |                   |
|                                     |       |         |           | Packaging 3 - 19 - B4B |       |              |                   |
|                                     |       |         |           | Packaging 3 - 20 - B4B |       |              |                   |
|                                     |       |         |           | Packaging 3 - 21 - B4B |       |              |                   |

|                |       |         |           |                        |  |
|----------------|-------|---------|-----------|------------------------|--|
|                |       |         |           | Packaging 3 - 22 - B4B |  |
|                |       |         |           | Packaging 3 - 23 - B4B |  |
|                |       |         |           | Packaging 3 - 24 - B4B |  |
|                |       |         |           | Packaging 3 - 25 - B4B |  |
|                |       |         |           | Packaging 3 - 26 - B4B |  |
|                |       |         |           | Packaging 3 - 27 - B4B |  |
|                |       |         |           | Packaging 3 - 28 - B4B |  |
|                |       |         |           | Packaging 3 - 29 - B4B |  |
|                |       |         |           | Packaging 3 - 30 - B4B |  |
|                |       |         |           | Packaging 3 - 31 - B4B |  |
|                |       |         |           | Packaging 3 - 32 - B4B |  |
|                |       |         |           | Packaging 3 - 33 - B4B |  |
|                |       |         |           | Packaging 3 - 34 - B4B |  |
|                |       |         |           | Packaging 3 - 35 - B4B |  |
| 170 QC 21 - SA | 6 pcs | 3/20/19 | 0.00 0.00 | QC 21 - SA - 21        |  |
|                |       |         |           | QC 21 - SA - 70        |  |
|                |       |         |           | QC 21 - SA - 53        |  |

MAR 26 2019

Part Op 100 - (Punch ends and deburr as per dwg), Punch per Dwg. D2010-104 and Spec Control Dwg D2727 Identify as D2010-Descriptions: 104

110 - 1- Bend as per Dwg D2010 using bending Jig D2010-104T2 2- flare before installing plug as per dwg D2010 3- Install D2057 plug as per Dwg D2010

120 - 1- flare before installing plug as per dwg D2010 2- Install D2057 plug as per Dwg D2010

130 - (QC5- Inspect part completeness to step on W/O)

140 - (Black Sandtex(Ref:4.3.5.7) per QSI005 4.3), START TIME: 9:00 11/3894 OVEN TEMPERATURE: 320°

150 - (QC3- Inspect Part Finish)

160 - (Identify as per dwg & Stock Location: \_\_\_\_\_)

170 - (QC21- Final Inspection - Work Order Release)

## Job BOM

| Part / Item      | Component Name              | Quantity      | Operation                | Container |
|------------------|-----------------------------|---------------|--------------------------|-----------|
| M304TR0.500W.049 | 304 Round Tube .500 X .049W | 9 ft (1.5 ea) | 100-Small Fab - Brake NC | S126572   |
| D2057            | Plug                        | 6 pcs (1 ea)  | 110-Small Fab - 2 - B4B  | S119992   |

## Job Allocations

| Operation                | Component Part   | Required | Inventory | Allocated |
|--------------------------|------------------|----------|-----------|-----------|
| 100-Small Fab - Brake NC | M304TR0.500W.049 | 9        | 119       | 0         |
| 110-Small Fab - 2 - B4B  | D2057            | 6        | 10        | 0         |



| Part Specifications |             |                                |                  |      |                  |
|---------------------|-------------|--------------------------------|------------------|------|------------------|
| Spec No             | Description | Target/Tolerance               | Limits           | Type | Special Comments |
| 1                   | Arm         | 7.900inches $\pm$ 0.030        | 7.930<br>7.870   |      |                  |
| 2                   | Arm         | 10.200 $\pm$ 0.030             |                  |      |                  |
| 3                   | Arm         | 45.000Degree $\pm$ 0.500       | 45.500<br>44.500 |      |                  |
| 4                   | Arm         | 45.000Degrees $\pm$ 0.500      | 45.500<br>44.500 |      |                  |
| 5                   | Arm         | 0.600inches + 0.008<br>- 0.001 | 0.608<br>0.599   |      |                  |

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Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

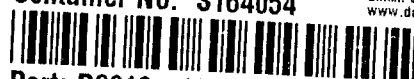
NCR No. \_\_\_\_\_

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                        |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |                        |  |
| Date : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Sequence #: _____                                                                                                                 | QTY Affected : _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | MRB (QS1042)           |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                   | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Completed By           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Lead hand / Supervisor |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | QC / QA Coordinator    |  |
| <b>Root Cause</b><br><br><div style="display: flex; flex-direction: column; align-items: flex-start;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Preservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |  |                        |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                        |  |



Container No: S164054



Part: D2010-104

Job No: 191471

Serial No/Batch: S164054

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

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Date: 03/20/19